

## AMENDMENTS

### In the Claims:

Please cancel claims 3 and 11-20 and amend the remaining claims as indicated below:

1. (Amended) A nucleic acid with a 5' end and a 3' end comprising a first functional nucleotide sequence and a scissile strand topoisomerase I cleavage motif sequence selected from the group consisting of CCCTT and TCCTT, wherein the scissile strand topoisomerase I cleavage motif sequence is located 3' to the first functional nucleotide sequence and provides a scissile strand topoisomerase I cleavage site that is not more than 10 bases from the 3' end of the nucleic acid, wherein the first functional nucleotide sequence is selected from the group consisting of a prokaryotic promoter sequence, a eukaryotic promoter sequence, a viral promoter sequence, a polypeptide tag encoding sequence, a terminator sequence, a fusible protein encoding sequence and an intronic sequence.
2. (Amended) The nucleic acid of claim 1, wherein the scissile strand topoisomerase I cleavage motif sequence is TCCTT.
4. (Amended) An adaptor comprising a first nucleic acid with a 5' end and a 3' end comprising a scissile strand topoisomerase I cleavage motif having a 5' motif sequence contiguous with a 3' motif terminal T, said 5' motif sequence being selected from the group consisting of CCCT and TCCT and providing a scissile strand topoisomerase I cleavage site that is not more than 10 bases from the 3' end of the first nucleic acid, said 3' motif terminal T being contiguous with a palindromic sequence of not less than two

nucleotides nor more than 10 nucleotides and said palindromic sequence being contiguous with a 3' end A.

5. (Amended) The adaptor of claim 4, further comprising a second nucleic acid having a 5' end sequence that is complementary to the 5' sequence of the scissile strand topoisomerase I cleavage motif.
6. (Amended) The adaptor of claim 4, wherein the 5' motif sequence of the scissile strand topoisomerase cleavage motif is TCCT.
7. (Amended) The adaptor of claim 4, further comprising a restriction endonuclease site located 5' to the scissile strand topoisomerase I cleavage motif.
8. (Amended) The adaptor of claim 4, further comprising a 5' end sequence that is complementary to the 5'-overhang of a restriction endonuclease site.
9. (Amended) The adaptor of claim 7 or claim 8, wherein the restriction endonuclease is selected from the group consisting of BamH I, Bgl II, Cla I, Dde I, Eae I, Eag I, EcoR I, Hind III, Kas I, Mbo I, Mlu I, Nco I, Nde I, Nhe I, Not I, PaeR7 I, Sal I, Sau3A, SpeI, Sty I, Xba I, Xha I, Xho I and Xma I.
10. (Amended) The adaptor of claim 4, further comprising a first functional nucleotide sequence selected from the group consisting of a prokaryotic promoter sequence, a eukaryotic promoter sequence, a viral promoter sequence, a mutational sequence, a polypeptide tag encoding sequence, a nucleic acid tag sequence, a terminator sequence, a

fusible protein encoding sequence, a radioactively labeled nucleotide sequence, a chemically labeled nucleotide sequence and an intronic sequence.

Please add the following new claims:

21. (New) The nucleic acid of claim 1, wherein the scissile strand topoisomerase I cleavage motif sequence is CCCTT.
22. (New) The adaptor of claim 4, wherein the 5' motif sequence of the scissile strand topoisomerase cleavage motif is CCCT.

## **REMARKS**

### **I. Status of the Claims**

Claims 1-10 are pending in the application and have been examined, claims 11-20 having been withdrawn pursuant to a restriction requirement. Claims 1, 3-5 and 7-10 stand rejected under 35 U.S.C. §112, first paragraph as allegedly lacking an adequate written description. Claims 1, 3-5 and 7-10 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. Claims 1-3 stand rejected under 35 U.S.C. §102(b) as allegedly anticipated by Cheng. Claims 4-10 stand rejected under §102(b) as allegedly anticipated by Hudson. The specific grounds for rejection, and applicant's response thereto, are set out in detail below.

### **II. Rejections Under 37 C.F.R. §112, First Paragraph**

Claims 1, 3-5 and 7-10 stand rejected under 35 U.S.C. §112, first paragraph as allegedly lacking an adequate written description. Applicant traverses, but in the interest of advancing the prosecution, applicant has amended the independent claims 1 and 4 to include the limitations of